

XP-002307126

(C) WPI/Derwent

AN - 2004-585912 [57]

AP - JP20030017086 20030127

CPY - TORA

DC - F02

FS - CPI

IC - D02J1/18

MC - F01-H06B F03-D04

PA - (TORA ) TORAY IND INC

PN - JP2004225222 A 20040812 DW200457 D02J1/18 012pp

PR - JP20030017086 20030127

XA - C2004-213765

XIC - D02J-001/18

AB - JP2004225222 NOVELTY - The method involves opening the reinforced fiber bundle (1) by conveying the reinforced fiber bundle between the transverse-oscillation rolls (6a) vibrated in roll-axis direction and the longitudinal-oscillation rolls (6b) vibrated in conveying direction of reinforced fiber bundle.

- DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) opening apparatus of reinforced fiber bundle; and

- (2) manufacturing method of unidirectional prepreg.

- USE - For opening reinforced fiber bundle e.g. carbon fiber bundle, glass fiber bundle and aramid fiber bundle during manufacturing of unidirectional prepreg used for molding fiber reinforced plastic (FRP).

- ADVANTAGE - The reinforced fiber bundle is opened at high speed, without generating fiber breakage.

- DESCRIPTION OF DRAWING(S) - The figure shows an outline front view of the reinforced fiber bundle opening apparatus.

- reinforced fiber bundle 1

- double rolls 2

- transverse-oscillation roll 6a

- longitudinal-oscillation rolls 6b

- free rotation rolls 6c,6d

- reinforced fiber sheet 8

- (Dwg.1/5)

IW - REINFORCED BUNDLE OPEN METHOD UNIDIRECTIONAL PREPREG MANUFACTURE  
CONVEY BUNDLE TRANSVERSE LONGITUDE OSCILLATING ROLL VIBRATION ROLL  
AXIS DIRECTION BUNDLE CONVEY DIRECTION

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CONVEY BUNDLE TRANSVERSE LONGITUDE OSCILLATING ROLL VIBRATION ROLL  
AXIS DIRECTION BUNDLE CONVEY DIRECTION

NC - 001

OPD - 2003-01-27

ORD - 2004-08-12

PAW - (TORA ) TORAY IND INC

Ti - Reinforced fiber bundle opening method in unidirectional prepreg manufacture, involves conveying fiber bundle between transverse and longitudinal oscillation rolls vibrated in roll-axis direction and bundle conveying direction

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